

# WESTER SPER

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TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION EPA CONTRACT 68-01-7367

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U.S. Environmental Protection Agency
11th Floor
230 South Dearborn Street
Chicago, Illinois 60604

September 30, 1988

TAT-05-G2-00184

Re: Inte

Interstate Pollution Control, Rockford, Illinois

TDD# 5-8807-12

Dear Mr. Faryan:

The U.S. Environmental Protection Agency (U.S. EPA) on July 13, 1988, tasked the Technical Assistance Team (TAT) to perform a site investigation at the Interstate Pollution Control (IPC) site in Rockford, Illinois in order to evaluate the threat to human health and the environment posed by the site.

The TAT sampling results were reviewed by the Agency for Toxic Substances and Disease Registry (ATSDR) which reported that the site posed no immediate threat to human health or the environment. Based on the ATSDR findings, the TAT recommends no further actions be taken by the U.S. EPA at this time.

The following report includes a review of background information and describes TAT's findings pursuant to this task.

Should you have any questions or require additional information, please feel free to contact us.

Very truly yours, ROX F. WESTON, INC.

Yaul Szewczykowski

Hydrogeologist

62 Scott D. Springer

Technical Assistance Team

Leader, Region V

PS/di Attachment

Roy F. Weston, Inc.
SPILL PREVENTION & EMERGENCY RESPONSE DIVISION

In Association with ICF Technology Inc., C.C. Johnson & Malhotra, P.C., Resource Applications, Inc., Geo/Resource Consultants, Inc., and Environmental Toxicology International, Inc.

#### SITE ASSESSMENT

FOR

# INTERSTATE POLLUTION CONTROL ROCKFORD, ILLINOIS

# Prepared for:

U.S. Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois

CONTRACT NO. 68-01-7367

TAT 05-G2-00184

TDD NO. 5-8807-12

Prepared by:

WESTON-SPER
Technical Assistance Team
Region V

September, 1988

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#### 1.0 SITE DESCRIPTION

The Interstate Pollution Control (IPC) site consists of approximately four acres of land located in the city of Rockford, Winnebago County, Illinois (Figure 1). The site is bordered to the east by Seminary Road, to the north by the Gunite Company cooling water discharge pond, to the south by Quaker Oats Company land and Quaker Avenue, and to the west by the Quaker Oats Company. The Peoples Avenue Landfill lies directly south of Quaker Avenue. A scrap metal reclamation plant lies directly east of Seminary Road (Figure 2).

IPC operated as a hazardous waste storage facility from 1974 until 1982 and accepted solvents, paint sludges, cyanide wastes and waste oils from local industries. The site is presently used for scrap metal and wood storage and for parking Roto-Rooter sewage pumping trucks. IPC has an office located at 4430 Boeing Drive in Rockford, Illinois which operates the Roto-Rooter service and also reclaims waste oils.

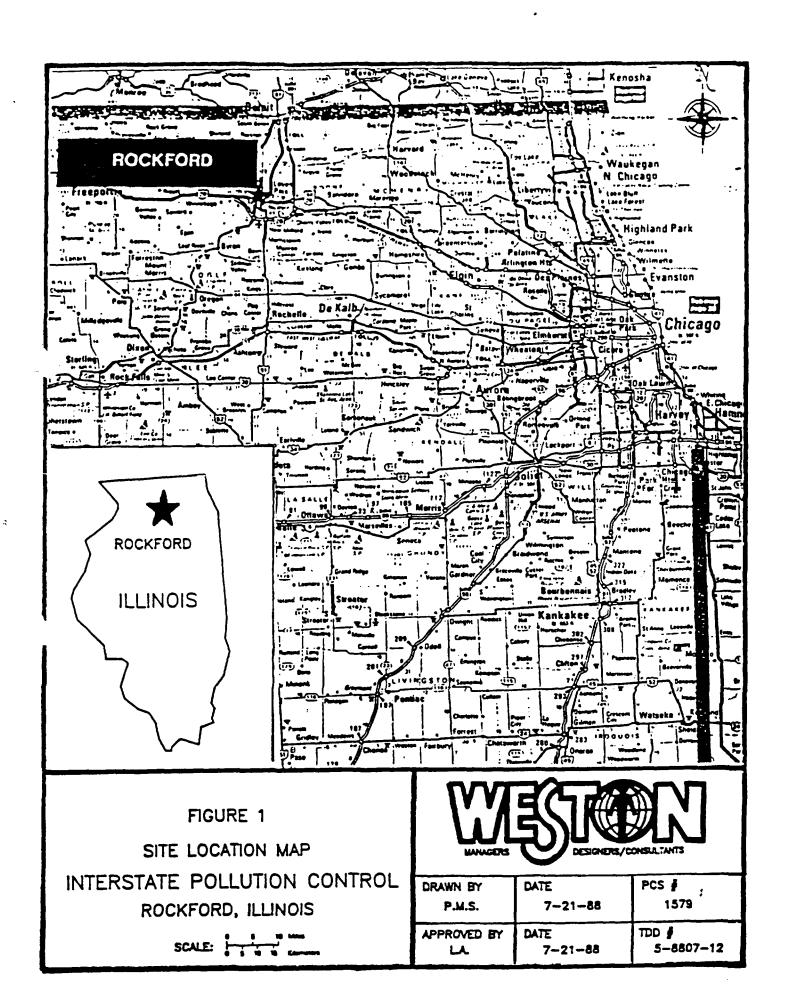
The site topography is generally flat with a slight elevation in the area of the capped lagoon on-site. In general, the county topography consists of broad rolling uplands which rise above alluviated valleys. The site is located in one of these valleys (Phillips, 1986).

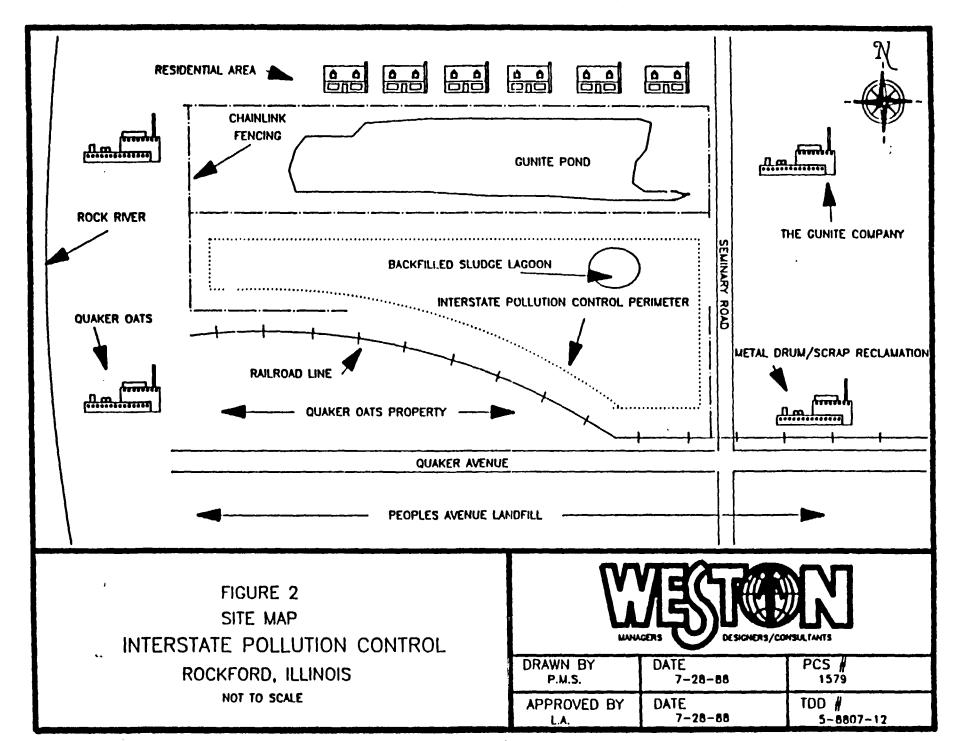
Surface and ground water drainage from the site flows southwest from the site towards the Rock River (Phillips, 1986) which is located approximately one-quarter mile west of the site (Figure 2).

The geology of the county has been characterized by Phillips, 1986. Upper bedrock formations in the county consist of dolomites which form one of the principal aquifers of the region. Underlying the bedrock are interbedded formations of dolomite, sandstone, and shale. Finally, sandstone underlies all of Winnebago county which is widely used as an aquifer throughout northern Illinois. A glacial outwash sand and gravel unit outcrops at the site. A discontinuous silt/clay layer has been observed at an average depth of 100 feet in the eastern sections of the site.

The site is only partially fenced and is therefore unrestrictive. Private residences are located approximately on-half to three-quarters of a mile from the site.

All businesses located downgradient (south and southwest) from the site appeared to be connected to city water. No residences were identified immediately downgradient of the site.





#### 2.0 SITE BACKGROUND

In March 1979, the National Enforcement Investigation Center (NEIC) sampled soils, a 100,000 gallon storage tank and ponded liquids at the IPC site. Analytical results indicated cyanide, heavy metals, and volatile organic chemicals (VOCs) were present in elevated concentrations. Consequently, a cleanup was conducted in 1979 where contaminated soils and 1,200 drums of liquids were removed from the site.

Monitoring wells were installed and soil borings drilled in 1982 and 1983 by the Illinois Environmental Protection Agency (IEPA). The IEPA reported the presence of a sludge lagoon on-site containing approximately 5,000 cubic yds. of hazardous sludge contaminated with toluene, xylene, polychlorinated biphenyls (PCBs) and other organic chemicals.

The IEPA wells, along with others, were used by the U.S. EPA Field Investigation Team (FIT) in August 1984 and April 1985 to conduct ground water sampling at IPC. The FIT 1985 sampling results indicated that the local ground water was contaminated with nine VOCs which included: vinyl chloride; chloroethane; 1,1-dichloroethane; trans-1,2-dichloroethene; trichloroethene; 1,1-trichloroethane; tetrachloroethene; 1,1-dichloroethene; and chloroform. Cyanide and heavy metals were also detected sporadically in ground water.

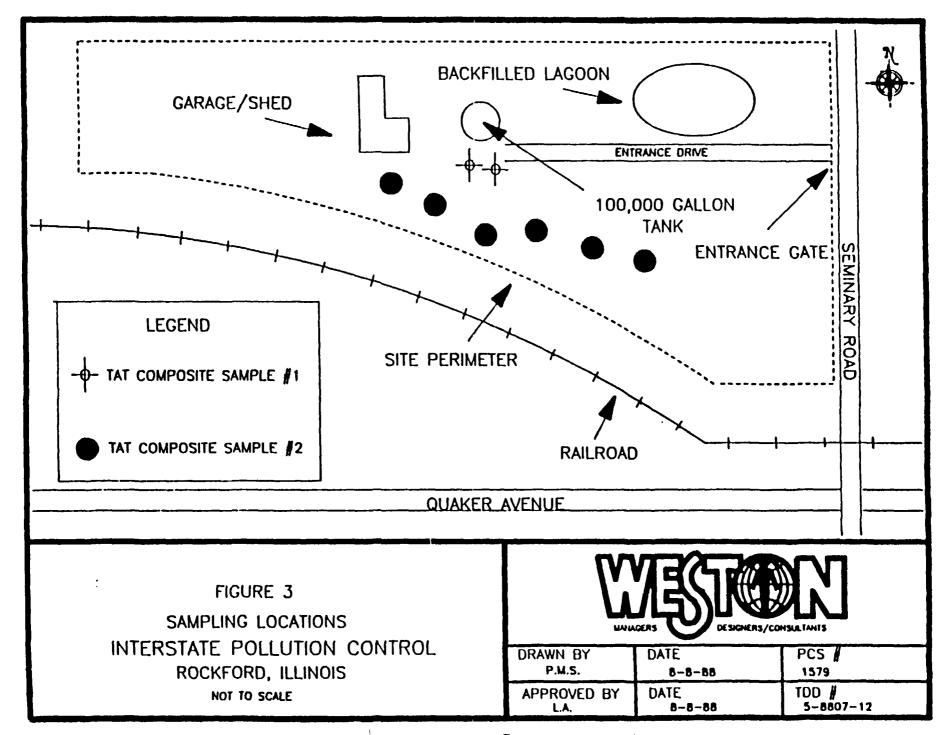
#### 3.0 SITE INSPECTION

On July 27, 1988, TAT members Paul Szewczykowski and Chuck Caron met with U.S. EPA On-Scene Coordinator (OSC) Len Zintak and IPC representative Bill Skoglund for the IPC site assessment.

The TAT and OSC conducted air monitoring around the perimeter and throughout the site with a photoionization detector (HNU), hydrogen cyanide (HCN) monitox unit, and combustible gas indicator (CGI). No readings above background levels were recorded in the ambient atmosphere.

The TAT, under the direction of OSC Zintak, collected two surface soil samples from on-site and one background sample from off-site. Sample 1 consisted of a composite of stained surface soil from two locations near the 100,000 gallon tank. Sample 2 consisted of a composite of surface soil from six locations along the southern perimeter of the site (Figure 3). A background grab sample (3) consisted of surface soil collected from Blackhawk Park, located approximately one-half mile northwest of the site.

Mr. Skoglund reported that the 100,000 gallon tank had been pumped out shortly after the 1979 cleanup. The tank appeared to be completely disconnected with no functioning valves. The area



around the tank had recently been filled and graded with gravel and clay material. There was no retaining berm around the tank.

The sludge lagoon on-site had been filled and capped with clay and was covered with scrap metal and debris. Mr. Skoglund reported that the lagoon sludges and liquids had been removed prior to the capping. He did not recall exactly when this took place.

The TAT samples were delivered to Suburban Laboratories in Hillside, Illinois on August 2, 1988 for analysis under TAT Analytical Services TDD# 5-8807-L13. Samples were analyzed for metals, cyanide, VOCs, acid/base/neutrals, pesticides, and PCBs. Hard copy final results were received September 20, 1988.

#### 4.0 ANALYTICAL RESULTS

The analytical results displayed the presence of the metals cadmium, copper, lead, selenium and zinc at the site at concentrations above both background levels and natural soil levels. Cyanide was also present in the site soils above background levels (Table 1).

The only organic compounds detected above background levels and above detection limits were bis(2-ethylhexyl)phthalate (130 ppm) and di-n-butyl phthalate (49.5 ppm), both at location 2, along the south border of the site.

#### 5.0 RECOMMENDATIONS

The metals and cyanide data along with site description information was reviewed by the Agency for Toxic Substances and Disease Registry (ATSDR). The ATSDR reported that the site posed no immediate threat to human health or the environment and recommended no action.

Based on the ATSDR findings, the TAT recommends no further actions be taken by U.S. EPA at this time.

TABLE 1

# ANALYTICAL RESULTS OF TAT SOIL SAMPLING INTERSTATE POLLUTION CONTROL July 21, 1988 (results in ppm)

PARAMETER	LOCATION	LOCATION	BACKGROUND	*NATURAL <u>BOILB</u>
Aluminum	1728	3189	3125	10,000-300,000
Antimony	ND	4.88	1.25	2-10
Barium -	16.6	376	56.4	100-3,000
Cadmium	1.22	11.2	0.28	0.01-0.7
Calcium	2147	2167	2233	
Chromium (Total)	9.60	71.6	3.94	1-1,000
Copper	68.2	276	8.56	2-100
Iron	3040	3007	3196	
Lead	37.0	384	18.0	2-200
Magnesium	508	516	583	600-6,000
Manganese	357	390	471	20-3,000
Mercury	0.011	0.014	0.036	0.01-0.3
Nickel	38.9	73.1	15.7	5-500
Potassium	132	262	279	
Selenium	ND	9.69	ND	0.01-2
Silver	4.0	3.0	1.0	0.01-5
Sodium	141	183	73.7	
Vanadium	33	77.3	ND	20-500
Zinc	411	1484	81.0	10-300
Cyanide (Total)	14.1	22.2	0.10	

ND - Not detected at method detection limits Analytical performed by Suburban Laboratories, Hillside, Illinois

\* - U.S. EPA. 1983

#### <u>REFERENCES</u>

- 1.) Phillips, K. (FIT), 1986. A Preliminary Hydrogeologic Investigation of Peoples Avenue Landfill and Interstate Pollution Control (IPC), Rockford, Illinois. Volume #1 of 3.
- 2.) U.S. EPA Office of Solid Waste and Emergency Response, 1983. "Hazardous Waste Land Treatment." pp. 274.

# ATTACHMENT A PHOTOGRAPHS



PHOTOGRAPH #1

Interstate Pollution Control, Rockford, Illinois

Front gate and entrance road to the site; looking west

across Seminary Road.

PHOTOGRAPHER: Chuck Caron C.C.

DATE: 7-27-88

TIME: Between 1000 and 1415 hours



## PHOTOGRAPH #2

Interstate Pollution Control, Rockford, Illinois
Backfilled and capped sludge disposal lagoon now covered
with scrap wood and metal. Looking west past the fallen
sheet metal fence from along the east border of the site.
PHOTOGRAPHER: Chuck Caron < C

FIX TEL: 7 = 77 = 28



PHOTOGRAPH #3

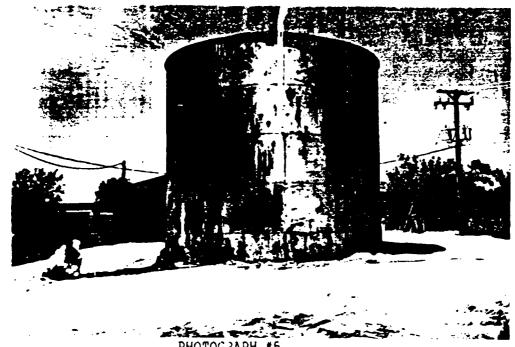
Interstate Pollution Control, Poukford, Illinois Payped laguon covered with scrap metal, wood and empty Brams. Looking west.

PHIRIGRAPHER: Chuck Caron 2 2 2 2 2 2015: 7:17-69 21MS: Between 1:00 and 14.5 nours



IHOTOGRAPH #4

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PHOTOGRAPH #5

Interstate Poliution Control, Rockford, Illinois A 100,000 gallon tank on site which had been used to store waste chemicals. Looking west.

PHOTOGRAPHER: Chuck Caron C.C.

DATE: 7-27-88

TIME: Between 1000 and 1415 hours



#### PHOTOGRAPH #6

Interstate Pollution Control, Rockford, Illinois Looking southwest from near the storage tank, the site is bordered by railroad tracks beyond which lies the property and building of the Quaker Oats Company. Quaker Oats is no longer in operation.

PHOTOGRAPHER: Chuck Caron < C.

DATE: 7-27-88

TIME: Between 1000 and 1415 hours



PHOTOGRAPH #7

Interstate Pollution Control, Rockford, Illinois

Sampling location #1; a stained soil area near the

storage tank. Looking northeast. PHOTOGRAPHER: Chuck Caron C.C.

DATE: 7-27-88

TIME: Between 1000 and 1415 hours

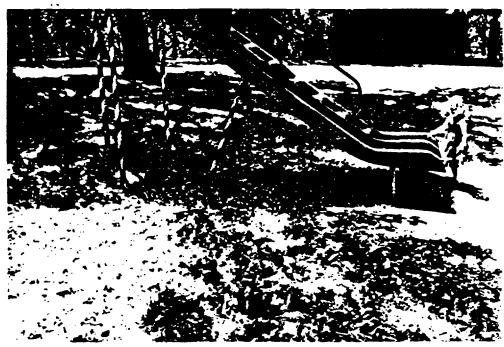


## PHOTOGRAPH #8

Interstate Pollution Control, Rockford, Illinois
One of six sufrace soil locations composited to form sample #2. Looking northwest from the southern border of the site. This sample was taken near the garage on the site.

PHOTOGRAPHER: Chuck Caron C.C.

DATE: 7-27-88



PHOTOGRAPH #9

Interstate Pollution Control, Rockford, Illinois Sampling location #3, the background sample, collected in Blackhawk Park which is located approximately one-half mile northeast of the site.

PHOTOGRAPHER: Chuck Caron C.C,

DATE: 7-27-88 TIME: Between 1000 and 1415 hours